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SEQUENCE LISTING

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<110> RODRIGUEZ-FRANCO, MARTA
JOST, WOLFGANG
WEISE, ANDREAS
GORR, GILBERT

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<141> 2006-02-13

<150> PCT/EP2004/008580

<151> 2004-07-30

<150> EP 03450184.1

<151> 2003-08-11

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<170> PatentIn Ver. 2.1

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 <212> DNA
 <213> *Physcomitrella patens*

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<210> 12

<211> 1221

<212> DNA

<213> *Physcomitrella patens*

<400> 12

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<210> 13

<211> 3060

<212> DNA

<213> *Physcomitrella patens*

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<210> 14
 <211> 4124

<212> DNA

<213> *Physcomitrella patens*

<400> 14

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<211> 3053

<212> DNA

<213> *Physcomitrella patens*

<400> 15

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<210> 16

<211> 1879

<212> DNA

<213> *Physcomitrella patens*

<400> 16

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<210> 17

<211> 1823

<212> DNA

<213> *Funaria hygrometrica*

<400> 17

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<210> 18

<211> 419

<212> DNA

<213> *Funaria hygrometrica*

<400> 18

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<210> 19

<211> 1333

<212> DNA

<213> *Funaria hygrometrica*

<400> 19

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<210> 20

<211> 3289

<212> DNA

<213> *Funaria hygrometrica*

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<210> 21

<211> 937

<212> DNA

<213> Marchantia polymorpha

<400> 21

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cttcgtttgg	acacatacat	ctggatcttg	agaggaacac	gtgaattaga	gttacatgcg	180
gtattgcgtc	atctttgcca	ggtaacggcc	gcgccgcaga	cctagcgggt	gcttctgcgc	240
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tgggaaatct	ttcatcttgt	tgaccatcga	ctctgtcctc	tcgatgaggt	ctgggatgat	360
tctgcatgtg	atactagcgc	agtcttcatg	attgtcacat	gcattccagat	gcgacatctg	420
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gttgacatat	acattgtgat	gtcatgtct	tttgtcagat	caccaagatc	cgcaaccatc	900
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<210> 22

<211> 3025

<212> DNA

<213> Marchantia polymorpha

<400> 22

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tttctttttc	tttaaattaa	atcttcttca	ctgcaatttt	tttattacga	ctcccacgag	180
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tttttttctaa	ttttatgaaa	agagataaat	atattaataa	tataggttat	ttagattatt	300
gaaattcaca	gaaaatacca	tttttgtctc	attcgatatg	ttctagatgt	gtgtgcgtat	360
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tttttatatgc	agatatttgc	ggatctttcc	aatcattatc	tagctcttgt	ttacattttt	600
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<210> 23

<211> 909

<212> DNA

<213> *Marchantia polymorpha*

<400> 23

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tcgtctgagc	tgatccgcgg	gtcgattttg	acgatgtcgt	gtcctcacct	acgcaagttt	420
ggttccgagg	attagttttg	aagatgctgt	caatgggaag	tttagctctt	ggttcgtgat	480
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tcatttcggt	ttccgtaacg	ctggatttaa	gctgaaaacg	ttcatcgatg	gattgaggat	600
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tgtatgcctg	ctgcttgtgc	gatgtagtgt	ggatttttcc	tccgatgttt	tccaaacgtg	840
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atcgtcgat						909

<210> 24
 <211> 2146
 <212> DNA
 <213> *Physcomitrella patens*

<400> 24
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 caggcaattc agaaatatag tgagatgaat accaggaata ttatttcaca tcgacccta 240
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 cccagctgcc cgaaatcggc cgcttggtca gcacggcacg acactgccc cgtgcaatcc 360
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 gtcacgcgtt acttcttttt cactcaatcg agtctgttta ttattggccg ctaggaaatt 600
 gcagcttcca actccgcac accgcgtgca gtacagtgga gatcttcaag agtgtcctca 660
 ccaggaattt gcaacttgct ccttgcaatt tgtaataaat ggacagagaa gcctagattc 720
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 tacaataaaa tatttttttg aaatgaaaat tggtttaaat aagcatgtaa ataatagacg 1380
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<210> 25
 <211> 524
 <212> DNA
 <213> *Funaria hygrometrica*

<400> 25
 gaattcattt ccattaacga gaatatgaca gtgggaagag cttccacgtc atccaaactc 60
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 ctgcgggata agggtagacg caaggcgcgg tattactgga taagagaagc ggccaaggcg 180
 gcagccactg tgggtccactt tgcgtcgatg ctacctactg cgattgtaat gacgagcggc 240
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 tactcgctgt cccactcggt ttctgggtgt gcatccgaag tttctggatg gttgcccgtc 360
 gttcaataaa ttgtcgcgcg tcgagctagc ggacactttt gtcaccgttc ttctctgttt 420
 attctggacc agagggtgct ttagctttgt tgtgtgtgag tccttgggga aatccctgcg 480
 cgtcacgaga gtttattgca ggaagtgt aaagcgttgt gaag 524

<210> 26
 <211> 2088
 <212> DNA
 <213> *Physcomitrella patens*

<400> 26
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 acaattattc taataaataa tgataaaaat tagacatctt gcaataaaaat ttcttttttaa 180
 aaatagatac ataacatgaa aaatatccca taaatagcta acaccatcaa aacatttgac 240
 caaatatgca ctttttagatg tgtcaagaca aaaagaaata tttgcaagat tttggagtat 300
 ctaaactaat gtttgccttc tttgcactat gagtaggatt tctttttattt tgtttagtga 360
 aaagatacat tgcaatttgt tttcataata aaaactatac taatgaaata gtgctaaaaa 420
 ataacaagat taaaaaaaca taacccttct tacaacctta aatccttcta attagactac 480
 ctcaaagttg tgccatttag cacaaaaacc attctttttaa atctacttaa ccctccaatt 540
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 gtatccacgc gctggaggaa gtaactttcc tacatgcaca gaaaaacatt ttcagattag 1200
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 aatctctcac agcaactggg cagggttgta tccgaacgtg gaaaacgcag caaccgttgt 1440
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 taaacatacc gggtggaatt tgtaccacc aggtcttgct cgggtgtccc tgtgcccag 2040
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<210> 27
 <211> 500
 <212> DNA
 <213> *Physcomitrella patens*

<400> 27
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 attgcgtcag gtcaatcctc tcagattctt tcgggtgctt tgtcgtaaac tagcttgatt 360
 gttgtccatt aagcttgggt gcttttcgtg agaaagcatg aaacttctat gacgaaaccc 420
 ggttgattgt aatgtaacta gtttgattgt agtttgaatt tggtaatgac gttgtatgat 480
 acataatgaa agtttcatga 500

<210> 28
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 28
 atccaggaga tggttcaggcg 20

 <210> 29
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 29
 ccgmacgctg tccatrgtyc c 21

 <210> 30
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 30
 acattgatgc gctccarctg c 21

 <210> 31
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 31
 ggbatggacg agatggagtt cac 23

 <210> 32
 <211> 34
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 32
agcacatgca caccaataac gcttgtcgca attc 34

<210> 33
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 33
gtcgtcatag acgacaagac cggggatcca cagc 34

<210> 34
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 34
tcagtgtgt ccgtgaatct ctctctctgc ttg 33

<210> 35
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 35
ctgtgttcgg attagactcc ccgtagcctt tgtg 34

<210> 36
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 36
tcgattggcg agttgcaagg agggcaagg 29

<210> 37
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 37
 tgcctgctca tcttgagtat ggcgtggtg 29

 <210> 38
 <211> 30
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 38
 ctgcaagcaa tgcgcactga aacaagatgg 30

 <210> 39
 <211> 30
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 39
 gacctggaaa cctgcacaat cacgcataga 30

 <210> 40
 <211> 27
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 40
 tagcataaga taaagatggt ctctacc 27

 <210> 41
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 41
 ctcaccagcc aatggctatg c 21

<210> 42
 <211> 26
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 42
 ccgtgggact tagttgtctt cacttc 26

 <210> 43
 <211> 26
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 43
 gatcgaaatt gctgcttggc ctccac 26

 <210> 44
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 44
 tcgaggatgt gtccttagtc gagaa 25

 <210> 45
 <211> 26
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 45
 aacttcacgc attccacaag ccacac 26

 <210> 46
 <211> 36
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 46
ttgatactcg agaagtccaa aataatttaa tgatac 36

<210> 47
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
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Primer

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catcttcgct aaggatgatc tacaacgag 29

<210> 48
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<220>
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Primer

<400> 48
catcttcagt gtgctctacc tcacg 25

<210> 49
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<212> DNA
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Primer

<400> 49
ctactcgagc acatataata ctgccctagt gcc 33

<210> 50
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Primer

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gacagatctc cttagtcgag aaggcgcgagg acgtg 35

<210> 51
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 Primer

 <400> 51
 gaccgcgtggg acttagttgt cttcacttc 29

 <210> 52
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 Primer

 <400> 52
 gctgctcttc tcgtgattgt ct 22

 <210> 53
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 Primer

 <400> 53
 cattcccacc cttccttctc ttc 23

 <210> 54
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 Primer

 <400> 54
 gttttctggc tcttccttgg 20

 <210> 55
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 Primer

 <400> 55
 atcgttctcg actcttcttc c 21

 <210> 56

<211> 21
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 Primer

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 gttacgctcg caatgcgtac t 21

 <210> 57
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 Primer

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 aactttctgc tgtcttgggt gcattg 26

 <210> 58
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 Primer

 <400> 58
 gacctgcagg cactcgagct tgtaatcatg gtcatag 37

 <210> 59
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 Primer

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 catttcttaa taccgacctg cccaacca 28

 <210> 60
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 Primer

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catggagaag aaatacttgc acatcaaaag 30

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Primer

<400> 61
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<210> 62
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Primer

<400> 62
catttttttag aatgataccta caggagttc 29

<210> 63
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Primer

<400> 63
agtctggcaa gttcccttcg 20

<210> 64
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<220>
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Primer

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gaagagaagg aagggtggga atg 23

<210> 65
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<223> Description of Artificial Sequence: Synthetic
Primer

<400> 65
ggaagaagag tcgagaagcg at 22

<210> 66
<211> 30
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<220>
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Primer

<400> 66
catcttgtcc aactaccgcg acccgaaccc 30

<210> 67
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Primer

<400> 67
aatctcgagt agcataagat aaagatgttc tctacc 36

<210> 68
<211> 34
<212> DNA
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<220>
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Primer

<400> 68
ggtaaagctc tcgagtgcag tagacgacaa aatg 34

<210> 69
<211> 26
<212> DNA
<213> Artificial Sequence

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Primer

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catcttgctc aagctgtgag aagctc 26

<210> 70
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<212> DNA
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 Primer

 <400> 70
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 <210> 71
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 <212> DNA
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 Primer

 <400> 71
 caactcgaga tcggtctgta agccctgtat ttg 33

 <210> 72
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 Primer

 <400> 72
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 <210> 73
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 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 73
 ttactcgaga ctctactaat tgacaagtat g 31

 <210> 74
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 Primer

 <400> 74
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<210> 75
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 <213> Artificial Sequence

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 Primer

 <400> 75
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 <210> 76
 <211> 26
 <212> DNA
 <213> Artificial Sequence

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 Primer

 <400> 76
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 <210> 77
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 <212> DNA
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 <220>
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 Primer

 <400> 77
 agcacctcga gtactgccct agtgccctaa tc 32

 <210> 78
 <211> 21
 <212> DNA
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 <220>
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 Primer

 <400> 78
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 <210> 79
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 <220>
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Primer

<400> 79
atgcatggca aaacatcccc tg 22

<210> 80
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<212> DNA
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<220>
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Primer

<400> 80
catggagatg aaatgttctg 20

<210> 81
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<213> Artificial Sequence

<220>
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Primer

<400> 81
ttaactcgag atacaagagt tataaatcat atac 34

<210> 82
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<213> Artificial Sequence

<220>
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Primer

<400> 82
atatctcgag atgcatgtaa gataattcca attaga 36

<210> 83
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<220>
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Primer

<400> 83
cattgctaaa atctctccac actcgaatc 29

<210> 84
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 Primer
 <400> 84
 atatctgcag tcatgaaact ttcattatgt atc 33

<210> 85
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 Primer
 <400> 85
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<210> 86
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 Primer
 <400> 86
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<210> 87
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 Primer
 <400> 87
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<210> 88
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 Primer
 <400> 88
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<210> 89
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 Primer

 <400> 89
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 <210> 90
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 Primer

 <400> 90
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 <210> 91
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 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 91
 tttcgcgaag ttacctaacc 20

 <210> 92
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 <212> DNA
 <213> Artificial Sequence

 <220>
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 Primer

 <400> 92
 tcatgatgtt aagcgttttc a 21

 <210> 93
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 <212> DNA
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 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 93
gttaacgaag gaggtgtccg 20

<210> 94
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 94
aagcttagca agcagctctc gcag 24

<210> 95
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 95
atcgacgata gactgcaagc c 21

<210> 96
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
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Primer

<400> 96
aggagtgtta cacatctttt ac 22

<210> 97
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 97
ggctaagacg acgcattctg tg 22

<210> 98
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
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 Primer

<400> 98
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<210> 99
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 99
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<210> 100
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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 100
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<210> 101
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 <212> DNA
 <213> Artificial Sequence

<220>
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 Primer

<400> 101
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<210> 102
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 102
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<210> 103
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 103
tatccggagg ttcccgcgac acc